

PCT

REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only

International Application No.

International Filing Date

Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference
(if desired) (12 characters maximum) 99-PCTSB-551

Box No. I TITLE OF INVENTION Pharmaceutical composition having antitumor activity and process for the preparation thereof

Box No. II APPLICANT

Name and address: (family name followed by given name, for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

KIM, Song-Bae

533-2, Bonggok-ri, Banpo-myeon, Gongju,
Chungcheongnam-do, 314-920
Republic of Korea

☒ This person is also inventor

Telephone No

Facsimile No

Teleprinter No

State (that is, country) of nationality: KR

State (that is, country) of residence: KR

This person is applicant for the purposes of: ☒ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

Name and address: (family name followed by given name, for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

☐ applicant only

☐ applicant and inventor

☐ inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality

State (that is, country) of residence

This person is applicant for the purposes of: ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

☐ Further applicants and/or (further) inventors are indicated on a continuation sheet.

Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE

The person identified below is hereby has been appointed to act on behalf of the applicant(s) before the competent International Authorities as: ☒ agent ☐ common representative

Name and address: (family name followed by given name, for a legal entity, full official designation. The address must include postal code and name of country.)

PARK, Sa Ryong

#301, Chongho Bldg., 823-5, Yeoksam 1-dong,
Kangnam-gu, Seoul, 135-081
Republic of Korea

Telephone No
+82-2-556-3076

Facsimile No
+82-2-556-3078

Teleprinter No

☐ Address for correspondence: Mark this check-box where no agent or common representative is has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent

Box No.V DESIGNATION OF STATES

The following designations are hereby made under Rule 4.9(a) (mark the applicable check-boxes; at least one must be marked):

Regional Patent

- ☒ **AP ARIPO Patent:** GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, SD Sudan, SL Sierra Leone, SZ Swaziland, UG Uganda, ZW Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT
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- ☒ **EP European Patent:** AT Austria, BE Belgium, CH and LI Switzerland and Liechtenstein, CY Cyprus, DE Germany, DK Denmark, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, IE Ireland, IT Italy, LU Luxembourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, and any other State which is a Contracting State of the European Patent Convention and of the PCT
- ☒ **OA OAPI Patent:** BF Burkina Faso, BJ Benin, CF Central African Republic, CG Congo, CI Côte d'Ivoire, CM Cameroon, GA Gabon, GN Guinea, GW Guinea-Bissau, ML Mali, MR Mauritania, NE Niger, SN Senegal, TD Chad, TG Togo, and any other State which is a member State of OAPI and a Contracting State of the PCT (if other kind of protection or treatment desired, specify on dotted line)

National Patent of other kind of protection or treatment desired, specify on dotted line(s):

- | | |
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Check-boxes reserved for designating States which have become party to the PCT after issuance of this sheet

Precautionary Designation Statement: In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation of a designation consists of the filing of a notice specifying that designation and the payment of the designation and confirmation fees. Confirmation must reach the receiving Office within the 15-month time limit.)

Box No. VI PRIORITY CLAIM

☐ Further priority claims are indicated in the Supplemental Box.

Filing date of earlier application (day/month/year)	Number of earlier application	Where earlier application is:		
		national application: country	regional application: regional Office	international application: receiving Office
item (1) 03 November 1998 (03.11.1998)	1998-47025	KR		
item (2) 11 November 1998 (11.11.1998)	1998-48277	KR		
item (3)				

☐ The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) only if the earlier application was filed with the Office which for the purposes of the present international application is the receiving Office identified above as item(s).

* Where the earlier application is an AIPC application, it is mandatory to indicate in the Supplemental Box at least one country party to the Paris Convention for the Protection of Industrial Property for which that earlier application was filed (Rule 4.10(h)(ii)). See Supplemental Box.

Box No. VII INTERNATIONAL SEARCHING AUTHORITY

Choice of International Searching Authority (ISA) (if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used).

ISA / AT

Request to use results of earlier search; reference to that search (if an earlier search has been carried out by or requested from the International Searching Authority)

Date (day/month/year)

Number

Country (or regional Office)

Box No. VIII CHECK LIST: LANGUAGE OF FILING

This international application contains the following number of sheets

request 3
description (excluding sequence listing part) 19
claims 3
abstract 1
drawings
sequence listing part of description
Total number of sheets 26

This international application is accompanied by the item(s) marked below

- 1 ☐ fee calculation sheet
- 2 ☒ separate signed power of attorney
- 3 ☐ copy of general power of attorney, reference number, if any
- 4 ☐ statement explaining lack of signature
- 5 ☐ priority document(s) identified in Box No. VI as item(s)
- 6 ☐ translation of international application into (language)
- 7 ☐ separate indications concerning deposited microorganism or other biological material
- 8 ☐ nucleotide and/or amino acid sequence listing in computer readable form
- 9 ☐ other (specify):

Figure of the drawings which should accompany the abstract

Language of filing of the international application

English

Box No. IX SIGNATURE OF APPLICANT OR AGENT

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request)

PARK, Sa Ryong

1 Date of actual receipt of the purported international application		For receiving Office use only	
3 Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application		2 Drawings	
4 Date of timely receipt of the required corrections under PCT Article 11(2)		<input type="checkbox"/> received	
5 International Searching Authority (if two or more are competent) ISA /		<input type="checkbox"/> not received	
6 <input type="checkbox"/> Transmittal of search copy delayed until search fee is paid			

Date of receipt of the record copy by the International Bureau

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR 99/00659

A. CLASSIFICATION OF SUBJECT MATTER

IPC⁷: A 61 K 35/78

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC⁷: A 61 K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0416502 A1 (KIM, SONG BAE) 13 March 1991 (13.03.91), totality document.	1-8
A	WO 98/24795 A1 (KIM, SONG BAE) 11 June 1998 (11.06.98), abstract; claims 2,3,5 and 6.	1-8

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:

„A“ document defining the general state of the art which is not considered to be of particular relevance

„E“ earlier application or patent but published on or after the international filing date

„L“ document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

„O“ document referring to an oral disclosure, use, exhibition or other means

„P“ document published prior to the international filing date but later than the priority date claimed

„T“ later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

„X“ document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

„Y“ document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

„&“ document member of the same patent family

Date of the actual completion of the international search

21 January 2000 (21.01.00)

Date of mailing of the international search report

28 February 2000 (28.02.00)

Name and mailing address of the ISA AT

Austrian Patent Office

Kohlmarkt 8-10; A-1014 Vienna

Fax: +43 1 53424 200

Authorized officer

Krenn

Telephone No.: +43 1 53424 435

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR 99/00659

Patent document cited in search report			Publication date	Patent family member(s)			Publication date
EP	A1	416502	13-03-1991	KR	Y1	9200322	15-01-1992
EP	B1	416502	30-03-1994				
WO	A1	9824795	11-06-1998	AU	A1	50692/98	29-06-1998

PCT

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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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A1

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WO 00/25802

(43) International Publication Date:

11 May 2000 (11.05.00)

(21) International Application Number:

PCT/KR99/00659

(22) International Filing Date:

3 November 1999 (03.11.99)

(30) Priority Data:

1998/47025 ✓

1998/48277 ✓

3 November 1998 (03.11.98)

11 November 1998 (11.11.98)

KR

KR

(71)(72) Applicant and Inventor:

KIM, Song-Bae [KR/KR];
533-2, Bonggok-ri, Banpo-myeon, Gongju, Chungcheong-
nam-do 314-920 (KR).

(74) Agent: PARK, Sa, Ryong; Chongho Building #301, 823-5,
Yeoksam 1-dong, Kangnam-gu, Seoul 135-081 (KR).

(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG,
BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB,
GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
KP, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,
SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU,
ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL,
SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ,
MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE),
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MR, NE, SN, TD, TG).

Published

*With international search report.
Before the expiration of the time limit for amending the
claims and to be republished in the event of the receipt of
amendments.*

(54) Title: PHARMACEUTICAL COMPOSITION HAVING ANTITUMOR ACTIVITY AND PROCESS FOR THE PREPARATION
THEREOF

(57) Abstract

The present invention relates to a pharmaceutical composition having antitumor activity and comprising Pulsatillae Radix and/or Ulmaceae cortex, and more particularly the composition may be prepared by extracting powdered Pulsatilla Radix and/or powdered Ulmaceae cortex, and optionally one or more ingredients selected from powdered Ginseng Radix and Glycyrrhizae Radix in a solvent at the temperature of below 60 °C, filtering and lyophilizing the extract, or admixing the above extracted solution with conventional auxiliaries, then filtering and lyophilizing the resulting mixture, and then formulating the lyophilized powder thus obtained to a pharmaceutical preparation by a conventional method used in the pharmaceuticals. The present antitumor composition is stable and maintains efficacy even if it is preserved for several years.

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